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## CLAIMS

What is claimed is:

1. A method for automated distribution of software in a fiber optic network, comprising:

identifying software comprised on each of a plurality of firmware cards located in a multiplexor, the multiplexor having a plurality of network units connected thereto over fiber optic connections;

determining whether the software comprised on each of the plurality of firmware cards located in the multiplexor is a prescribed software version;

if the software comprised on one of said

plurality of firmware cards located in the multiplexor is

not the prescribed software version, updating the

software;

identifying software comprised on a firmware card located in one of the plurality of network units;

determining whether the software comprised on the firmware card located in the network unit is a prescribed software version; and

if the software comprised in the firmware card

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located in one of the plurality of network units is not the prescribed software version, updating the software.

- 2. The method of claim 1, wherein identifying software comprised on each of a plurality of firmware cards located in a multiplexor comprises identifying a version for the software.
- 3. The method of claim 1, wherein identifying software comprised on a firmware card located in a network unit comprises identifying a version for the software.
- 4. The method of claim 1, wherein identifying software comprised on each of a plurality of firmware cards located in a multiplexor comprises identifying software comprised on an optical interface unit card.
- 5. The method of claim 1, wherein identifying

  software comprised on each of a plurality of firmware

  cards located in a multiplexor comprises identifying

  software comprised on an optical multiplexing unit card.

6. The method of claim 1, wherein identifying software comprised on a firmware card located in one of the plurality of network units comprises identifying software comprised on an optical interface unit card.

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7. A computer readable medium having computer executable instructions stored thereon for performing the method recited in claim 1.

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8. A method for automated distribution of software in a fiber optic network, comprising:

identifying software comprised in a multiplexor, the multiplexor having a plurality of network units connected thereto over fiber optic connections and each of the plurality of network units having a plurality of fiber optic connections extending therefrom to end users;

identifying the software on each of the plurality of network units;

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determining if the software on each of the plurality of network units is compatible with the software on the multiplexor; and

if the software on one of the plurality of

network units is not compatible with the software on the multiplexor, updating the software on the one of the plurality of network units.

- 5 9. The method of claim 8, wherein identifying the software on each of the plurality of network units comprises identifying the software version on each of the plurality of network units.
- 10. The method of claim 8, wherein identifying software comprised in a multiplexor comprises identifying a software version comprised in a multiplexor.
  - 11. The method of claim 8, wherein determining if the software on each of the plurality of network units is compatible with the software on the multiplexor comprises determining if a software version on each of the plurality of network units is compatible with a software version on the multiplexor.

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12. The method of claim 8, wherein identifying software comprised in a multiplexor comprises determining the version of software on a firmware card in the

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multiplexor.

- 13. The method of claim 12, wherein determining the version of software on a firmware card in the multiplexor comprises determining the version of software on at least one of an optical interface unit card and an optical multiplexing unit card.
- 14. The method of claim 8, wherein identifying the software on each of the plurality of network units comprises determining the version of software on firmware cards located on the plurality of network units.
- 15. The method of claim 14, wherein determining the version of software on firmware cards located on the plurality of network units comprises determining the version of software on an optical interface unit card.
- 16. A computer readable medium having computer
  20 executable instructions for performing the method of
  claim 8.
  - 17. A method for automated distribution of software

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in a fiber optic network, comprising:

updating to the same software version, a

plurality of firmware cards located in a multiplexor; and

updating to the same software version, a

plurality of firmware cards located on at least one

network unit in communication with the multiplexor.

- 18. The method of claim 17, wherein updating to the same software version, a plurality of firmware cards located in a multiplexor comprises updating to the same software version, a plurality of at least one of an optical interface unit card and an optical multiplexing unit card.
- 19. The method of claim 17, wherein updating to the same software version, a plurality of firmware cards located on at least one network unit in communication with the multiplexor comprises updating to the same software version, a plurality of optical interface unit cards.
  - 20. A system for automatically distributing software in a fiber optic network, comprising:

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a processor for executing computer executable instructions; and

memory for storing computer executable instructions, wherein said memory has stored therein computer executable instructions for performing the following steps:

identifying software comprised on each of a plurality of firmware cards located in a multiplexor, the multiplexor having a plurality of network units connected thereto over fiber optic connections;

determining whether the software comprised on each of the plurality of firmware cards located in the multiplexor is a prescribed software version;

if the software comprised on one of said plurality of firmware cards located in the multiplexor is not the prescribed software version, updating the software;

identifying software comprised on each of a plurality of firmware cards located in the plurality of network units;

determining whether the software comprised on each of the plurality of firmware cards located in the plurality of network unit is a prescribed software

version; and

if the software comprised in one of the plurality of firmware cards located in the plurality of network units is not the prescribed software version, updating the software.